From: Bucholtz, Paul (DEQ)

To: <u>Draper, Cynthia E; Patricia.White@CH2M.com; Abid, Joseph A; Bondy, Garret E; Roth, Charles;</u>

lcforten@gapac.com; Curtis, Emmet F; SantiniAD@cdmsmith.com; Blischkee@cdmsmith.com; Eykholt, Jerry R; Fogell, Heidi E; Frank.Dillon@CH2M.com; gtgriffi@gapac.com; Glover, Tim; LavelleJM@cdmsmith.com; Saric, James; Jeff.Keiser@CH2M.com; Bradley, John (DEQ); mclark-59@comcast.net; kingtw@cdmsmith.com;

GendusaTC@cdmsmith.com; "John Kern"; Venne, Louise S; Prytula, Mark T

Subject: RE: Follow up to the Kalamazoo River 11/14 Work Group Call

Date: Friday, November 15, 2013 12:07:39 PM

Cvnthia.

Thanks for sharing the follow-up info on the combined-section SWAC estimates. The main issue I see with using these particular estimates is that it bleeds everything together by making the initial and post RA SWACs much more similar. Also, the S-3 and S-4 post SWACs are now the same which doesn't seem realistic given the difference in overall work area between the two alternatives. As we have discussed before, SWAC estimates based on area/average concentration may help to bound the uncertainty in the difference between the two alternatives.

The fish trend estimation process looks much improved over previous efforts, and we will continue to look into that prior to Thursdays meeting. It is the new input parameters have the effect of making the various alternatives look much less distinguishable. Given the acknowledged squishy data sets, I recognize that we don't have the luxury of certainty in our estimates. I think introducing a modicum of common sense into how the level of effort realized by the various alternatives will effect SWACs (more work = lower SWACs), may be helpful in trying to work our way through this puzzle.

I appreciate you sharing your work the way you have done, it helps us get up to speed on these complex issues. I will give you a call to follow up.

Paul

From: Draper, Cynthia E [mailto:Cynthia.Draper@amec.com]

Sent: Friday, November 15, 2013 11:29 AM

To: Patricia.White@CH2M.com; Abid, Joseph A; Bondy, Garret E; roth.charles@epa.gov;

Icforten@gapac.com; Curtis, Emmet F; SantiniAD@cdmsmith.com; Blischkee@cdmsmith.com; Eykholt,

Jerry R; Fogell, Heidi E; Frank.Dillon@CH2M.com; gtgriffi@gapac.com; Glover, Tim;

LavelleJM@cdmsmith.com; saric.james@epa.gov; Jeff.Keiser@CH2M.com; Bradley, John (DEQ); mclark-59@comcast.net; Bucholtz, Paul (DEQ); kingtw@cdmsmith.com; GendusaTC@cdmsmith.com; 'John

Kern'; Venne, Louise S; Prytula, Mark T

Subject: Follow up to the Kalamazoo River 11/14 Work Group Call

Thanks to those who participated in yesterday's Work Group call. Please see below for follow-up information.

Step down applied to change in pre and post SWACs in River Sections 2, 3 and 4

The SWACs in interval 1 (0 to 6") for Sections 2, 3, and 4 of Area 1 of the Kalamazoo River are listed below. We used the difference in the combined Section 2, 3, and 4 SWACs (yellow highlight) to estimate the step downs for the S-3 and S-4 alternatives. The SWAC values for each individual section are the same as those provided in Table 4-3 of the July 2013 Area 1 draft revised FS. We used the aggregate SWAC for Sections 2, 3, and 4 because the S-3 and S-4 alternatives called for

removals in all these Sections. An area wide SWAC for interval 1 was applied to the step down for S-5 with the difference between 0.59 (pre RA SWAC) and 0.23 (post RA SWAC) mg/kg PCBs as listed in Table 4-3 of the FS.

Section	Current SWAC (mg/kg)	Post RA S-3 SWAC (mg/kg)	Post RA S-4 SWAC (mg/kg)
2	0.23	0.23	0.23
3	2.19	0.47	0.35
4	0.42	0.38	0.38
Combined 2,3,4	0.68	0.37	0.35

Prepared/Date: MTP 10/24/13 Checked/Date: LSV 10/24/13

Fish tissue goals and trending

We will revise the fish trends to extend time to reach the 0.042 and 0.072 mg/kg PCB goal based on the CDM 2003 OU-5 risk assessment. The 0.2 mg/kg threshold line will be removed.

From: Abid, Joseph A [mailto:joseph.abid@amec.com]

Sent: Wednesday, November 13, 2013 5:35 PM

To: Abid, Joseph A; Bondy, Garret E; Charles Roth; Chase Fortenberry; Curtis, Emmet F; Draper, Cynthia E; Drew Santini; Ellis, Steve; Eric Blischkee; Eykholt, Jerry R; Fogell, Heidi E; Dillon, Frank/DET; Garry Griffith; Glover, Tim; James Lavelle; James Saric; Keiser, Jeff/MKE; John Bradley; John Canar; John Kern; Milt Clark; White, Patricia/BOS; Paul Bucholtz; Todd King; Tony Gendusa

Subject: Kalamazoo River 11/14 Work Group Call - Discussion Materials

Discussion materials for tomorrow's (11/14) 3 PM EST Kalamazoo River Work Group call are attached.

As a reminder, call in info is as follows:

Conf Call: 866-324-4184 Access Code: 5987685

Thanks!

Joe Abid **Project Manager / Senior Environmental Scientist**

AMEC

Environment & Infrastructure 46850 Magellan Drive, Suite 190 Novi, Michigan 48377 (248) 926-4008 (248) 313-3692 (direct) (248) 926-4009 (fax)

(517) 290-7629 (mobile)

joseph.abid@amec.com

amec.com

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